

## CLAIMS

1. A signalling system comprising a transponder including a controller for controlling the operation of the transponder, a radio transceiver  
5 coupled to the controller by way of switching means, an electric current source coupled to the controller, and a radio signal receiving means coupled to the controller for providing signals for activating the switching means to inhibit or permit the operation of the radio transceiver, a transponder interrogation station for interrogating the transponder by way of signals transmitted to, and  
10 received from, the radio transceiver, and a source of switching signals receivable by the signal receiving means when in range.

2. A system as claimed in claim 1, characterised in that the transponder further comprises at least one transducer coupled to the  
15 controller and a random access memory for storing data representative of information produced by the transponder.

3. A system as claimed in claim 2, characterised in that the transponder interrogation station has storage means for storing said data  
20 relayed by the transponder in response to an interrogation signal.

4. A system as claimed in claim 1, 2 or 3, characterised in that the radio receiving means comprises a passive radio receiver and in that the  
25 source of switching signals comprises a radio transmitter for communicating with the passive radio receiver.

5. A system as claimed in any one of claims 1 to 3, characterised in that the transponder interrogation station and the source of switching signals  
30 operate at different frequencies.

6. A system as claimed in claim 4, characterised in that the transponder interrogation station and the source of switching signals operate at different frequencies.

5 7. A transponder for use in an interrogation system, the transponder including a controller for controlling the operation of the transponder, a radio transceiver coupled to the controller by way of switching means, an electric current source coupled to the controller, and a radio signal receiving means coupled to the controller for providing signals for activating the switching  
10 means to inhibit or permit the operation of the radio transceiver.

8. A transponder as claimed in claim 7, characterised in that the transponder further comprises at least one transducer coupled to the controller and a random access memory for storing data representative of  
15 information produced by the transponder.

9. A transponder as claimed in claim 8, characterised in that the transponder interrogation station has storage means for storing said data relayed by the transponder in response to an interrogation signal.  
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10. A transponder as claim 7, 8 or 9, characterised in that the radio receiving means comprises a passive radio receiver.